

and have been rejected on both formal and prior art grounds. Applicant has amended certain of these claims, and it is submitted that the claims are now in condition for allowance.

The specification has been amended in two respects. First, the reference to related applications has been amended to include a reference to the PCT case from which priority is claimed, and to identify that this is a "371" application from that PCT application. Second, descriptions of the Figures 1a, 1b, 2a and 2b have been added. These amendments are responsive to the deficiencies raised in the Office Action with respect to the specification, and it is believed that these objections are thereby obviated.

Claim 17 has been amended in response to the 112 rejection raised in the Office Action. Specifically, claim 17 has been rewritten to positively recite that the claimed method involves using the modified lignocellulosic plant material in the form of a paper.

Claim 22 as been rejected under 102 as unpatentable over the cited EP application. The Office Action notes that the "board" described in the EP application could be construed to be structurally indistinguishable from the term "sheet". Claim 22 has been amended to require that the plant material is in the form of a paper or fabric, thereby patentably distinguishing from the "board" disclosed in the EP application. Support for this amendment is found in the last full paragraph on page 4.

All of the claims have been rejected as unpatentable over the Sohnius patent in view of the EP application. Applicant submits that this rejection is unwarranted and that only hindsight suggests the present invention.

The basis of the present invention is the inventors' discovery that treated lignocellulosic material as defined in claim 1 has excellent properties for the absorption

of the hydrophobic water-immiscible liquids. This is demonstrated in the application and by the experimental data submitted with the response of June 30, 1999. It is shown, for example, that the material employed in the invention preferentially absorbs oil (73.5%) as opposed to water (26.5%).

The Sohnius patent discloses a method of removing oil from water using a cellulosic material that has been coated with a water repellent mixture. There is nothing in Sohnius which suggests a modification to the cellulosic material, and certainly nothing to indicate any particular modification that might actually improve the functioning of the material to absorb oil.

Moreover, substitution of the cellulosic material of the Sohnius patent with any other material is dubious, but particularly where the material has been modified in certain respects. The Sohnius patent only describes the use of "ordinary" cellulosic material. One in the art would consider that modifications to this material could be expected to reduce, rather than increase, its utility for absorbing oil. Chemical modifications that affect one physical property favorably will frequently affect other physical properties adversely.

By comparison, there is nothing whatsoever in the EP application to suggest or teach that the material produced by the method of that specification will have such advantageous properties for absorption of hydrophobic water-immiscible liquids. Therefore, there is no reason for the skilled person even considering replacing the cellulosic material of Sohnius with that prepared in accordance with the EP application.

Moreover, the changes made by the EP application could be expected to work adversely for the property of oil absorption. The EP application teaches the modification

as increasing dimensional stability, which does not suggest increased absorption. Instead, more rigid objects typically are considered to be less absorptive. Similarly, the changes being directed to increased resistance to attack suggest physical modifications that make the material less receptive to outside materials, rather than more receptive. The result is that one in the art would not be directed to substitute the EP material in the Sohnius process.

This conclusion is further evidenced by the fact that the end purpose of the EP material does not direct one to use of the material in the Sohnius process. The EP application is concerned with increasing structural rigidity for wood and fabricated boards, and other structural elements. One in the art of absorbing oil from water would not look to the field of structural materials to improve processes and materials for absorbing oil.

To reach an opposite conclusion is to suggest that it would be "obvious" to use any cellulosic material for oil absorption. One in the art would know that not all cellulosic materials are suitable for oil absorption. Therefore, at most one would look to cellulosic materials that have been modified or blended in a manner calculated to increase oil absorptivity. This means modifications or compositions that make them more receptive to outside materials. The present invention provides a selection of specific materials, unobvious materials, which have advantageous properties for which there is no suggestion or teaching in the art.

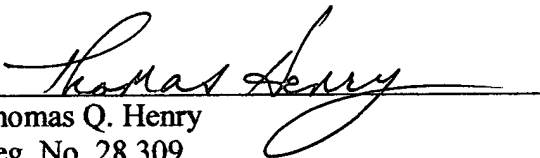
A number of the claims have been rejected on similar grounds based upon the Norman patent in view of the EP application. The foregoing arguments apply equally to this ground of rejection, and applicant submits that the claims are allowable over this

basis for rejection. The Norman patent provides no more suggestion or teaching for the use of the EP application material than does the Sohnius patent. There is nothing in the art that would point to this proposed combination, but rather there are suggestions against such a combination.

Applicant submits that the present invention is patentable over the cited art for the reasons stated herein. Applicant has amended the specification and claims to address the non-art grounds for rejection, and submits that those grounds for rejection have been obviated. Reconsideration of the above-identified patent application, as amended, is respectfully requested and allowance of the claims in the application is solicited.

Respectfully submitted,

By:

  
Thomas Q. Henry  
Reg. No. 28,309  
Woodard, Emhardt, Naughton, Moriarty  
& McNett  
Bank One Center Tower  
111 Monument Circle, Suite 3700  
Indianapolis, IN 46204-5137  
(317) 634-3456

PBA/SDR/D086410PUS:TQH:76705